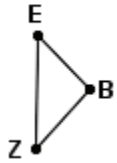
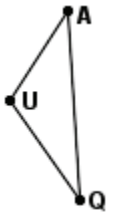
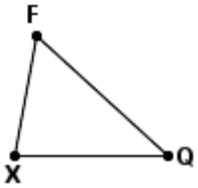
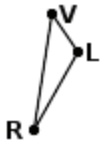
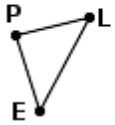
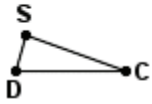
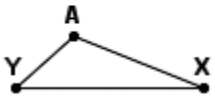
Name _____ Date _____

The Law of Cosines

(Answer ID # 0733178)

Use the law of cosines to solve for the unknown.

1.  $\overline{MV} = 9.8$ $\overline{MD} = 20$ $\overline{DV} = 13.1$ $\angle D =$ _____ °	2.  $\overline{ZE} = 16.3$ $\overline{ZB} = 11.4$ $\overline{BE} = 10.6$ $\angle B =$ _____ °	3.  $\angle A = 23°$ $\overline{QA} = 31.7$ $\overline{AU} = 18$ $\angle U =$ _____ °
4.  $\angle F = 58°$ $\overline{XF} = 122$ $\overline{QF} = 178$ $\angle X =$ _____ °	5.  $\angle X = 65°$ $\overline{NX} = 27$ $\overline{GX} = 20.4$ $\angle G =$ _____ °	6.  $\overline{RV} = 118$ $\overline{RL} = 90$ $\overline{LV} = 46$ $\angle V =$ _____ °
7.  $\overline{EP} = 80$ $\overline{EL} = 106$ $\overline{LP} = 76$ $\angle P =$ _____ °	8.  $\angle C = 20°$ $\overline{DC} = 77$ $\overline{CS} = 74.2$ $\angle D =$ _____ °	9.  $\overline{YA} = 66.3$ $\overline{YX} = 159.8$ $\overline{XA} = 119$ $\angle Y =$ _____ °